



ATTACHMENT A

Remarks

By this Amendment, independent claim 1 has been amended to better define the present invention. Consistent therewith, dependent claim 3 has been canceled; and consistent therewith as well or for better clarity, minor changes have also been made in the remaining dependent claims. It is submitted that the present application is in condition for allowance for the following reasons.

In the *Claim Rejections - 35 USC § 102/103* section of the outstanding Office Action, independent claim 1 was rejected under 35 USC § 102 as being anticipated by or obvious over the Vitkala patent; while in the *Claim Rejections - 35 USC § 103* section, dependent claims 2-9 were rejected as being obvious over the Vitkala patent in view of the Maguire patent. However, for the following reasons, it is submitted that amended claim 1 is allowable over the Vitkala patent, either singly or in combination with the Maguire patent.

As now more particularly claimed in amended independent claim 1, the present invention positions the blast channels parallel to the glass transport direction, and locates air temperature measuring instruments along a plurality of observation lines which are also disposed parallel to associated blast channels. With this configuration, observing of a location area for one or more glass sheets along one or more observation lines is utilized by the control system to raise as needed the heating effect of the heating elements of the blast channels with one or more glass sheets adjacent thereto.

The **Vitkala patent** discloses a method for heating glass sheets in which a temperature sensor 12 is used to maintain the circulating air heating temperature of the furnace substantially constant therein. This constant air temperature is desired for the primary reason "to prevent the

heat expansion of furnace structures" (2/44-45). In the disclosed method, when a glass sheet enters the preheating furnace, the temperature sensor senses a reduction in the temperature of the furnace circulating air caused by cooling from the glass sheet. Then, by use of a control device 13 controlling the speed of the circulating air fans and the heat output of resistance heaters to the circulating air, the temperature of the circulating air is maintained substantially constant (or more precisely, within a designated range) as the glass is heated up to a desired temperature.

Initially, it is noted that the Vitkala patent does not disclose nor make obvious the use of blast channels parallel to the glass transport direction. As such, the Vitkala patent likewise does not disclose nor make obvious the locating of air temperature measuring instruments along a plurality of observation lines disposed parallel to associated blast channels; nor the observing of a location area for one or more glass sheets along one or more observation lines which is then utilized by the control system to raise as needed the heating effect of the heating elements of those blast channels having one or more glass sheets adjacent thereto.

The **Maguire patent** discloses a multiple sensor, temperature controlled R-F ablation system. As noted therein, the disclosed invention "relates generally to the field of devices for cardiac surgery, and more specifically to devices for R-F ablation of cardiac tissue" (1/9-11). In the field of cardiac surgery, "ablation of [undesired] cardiac tissue has been accomplished by means of radio frequency electrical current, ... carried out by means of a catheter, inserted into the closed heart" (1/26-32). As further noted: "R-F ablation catheters are effective to induce small lesions in heart tissue ... in the immediate vicinity of the electrode. However, the medical community has expressed a desire for devices which produce larger and/or longer lesions, to reduce the number of applications of energy (burns) required" (1/36-41). However, "[t]he actual extent of heating is somewhat unpredictable" (1/48-49); and [h]eating of the tissue beyond a

certain point can cause dissection or charring of the tissue" (1/48-49) which is not desirous for a variety of reasons. In order to avoid such overheating, "[o]ne response to this phenomenon has been the inclusion of thermocouple within the ablation electrode, in conjunction with feedback control to modulate the R-F signal to maintain the electrode temperature at a set parameter" (56-60). The invention of the Maguire patent is:

directed toward expanding and improving the clinical applicability of R-F ablation, by accurately determining the ablation site and by increasing the overall size and extent of the lesions induced by R-F ablation. These goals are pursued by means of an ablation catheter employing one or more electrodes extending of substantial length, located adjacent the distal end of the catheter, in conjunction with a temperature control system employing multiple temperature sensors, arranged along the electrode or electrodes. (2/11-21)

As noted by the examiner, the invention may include in one embodiment a temperature controller 282 to prevent overheating of the tissue has associated therewith a temperature processing circuit 292 which:

processes the signals from the temperature sensors within the catheter to provide a combined signal on line 294 The combined signal may be indicative of the average value of the signals from the temperature sensors, or may correspond to the signal from the temperature sensor indicating the highest temperature. (13/20-26).

In view of the above, it is first evident that the Maguire patent is non-analogous art and should not be used in combination with the Vitkala patent. As stated in MPEP §2104.01(a)(I), art is analogous where:

a reference in a field different from that of applicant's endeavor may be reasonably pertinent if it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his or her invention as a whole.

In this case, it is submitted that analogous art would be that related to heating of objects in a furnace or the like. The Maguire patent clearly relates "generally to the field of devices for cardiac surgery" as stated therein, or more particularly to the destruction of human tissue via R-F

localized induction heating via a catheter. Such a reference is clearly non-analogous to the present invention, as further evident by the examples of analogous art noted in MPEP §2104.01(a)(IV) which show that some more basic commonality is needed for art to be analogous.

However, even assuming that the Maguire patent were analogous art in some manner, it is apparent that the examiner has used an impermissible hindsight reconstruction to achieve the suggested combination. In particular, there is no suggestion in the Vitkala patent that the single temperature sensor is not sufficient for the needs of the invention therein. In addition, the Maguire patent teaches the use of multiple sensors in order to prevent overheating of the surround tissue and to promote uniform heating of the tissue adjacent all of the heating elements. While certainly useful in the field of tissue ablation, such a teaching is not applicable to the Vitkala patent where it is desired to maintain the circulating air heating temperature of the furnace substantially constant for the primary reason “to prevent the heat expansion of furnace structures” (as noted above). It is therefore submitted that those of ordinary skill, without the benefit of a hindsight reconstruction of the present invention, would not combine the references as suggested by the examiner.

Finally, it is further submitted that even if the Vitkala patent and Maguire patent were combined as suggested by the examiner, the hybrid combination would not make the present invention as now claimed in amended claim 1 obvious. As noted above, the Vitkala patent does not disclose nor make obvious the use of blast channels parallel to the glass transport direction, the locating of air temperature measuring instruments along a plurality of observation lines disposed parallel to associated blast channels, or the observing of a location area for one or more glass sheets along one or more observation lines which is then utilized by the control system to

raise as needed the heating elements of the blast channels with one or more glass sheets adjacent thereto. The Maguire patent adds no teaching or suggestion to make such features obvious in the Vitkala patent even if it is obvious to use multiple sensors in the Vitkala patent as suggested by the examiner.

Therefore, for all of the foregoing reasons, it is submitted that amended independent claim 1 is neither disclosed nor made obvious by the Vitkala patent, taken singly or in combination with the Maguire patent, so that claim 1 is now allowable. For these same reasons, it is submitted that dependent claims 2 and 4-9 are similarly allowable.

For all of the foregoing reasons, it is submitted that the present application is in condition for allowance and such action is solicited.